Specifications Summary

Source characteristics
Frequency
Range: 300 kHz to 1300 MHz
Resolution: 1 Hz
Accuracy: < 5 ppm
Output
Power range: 0 to 16 dBm
w/ attenuator −60 to 13 dBm
75 Ω reduces output by 3 dB
Resolution
Port flatness: +/−1.0 dB
w/attenuator +/−2.0 dB
w/meter correction +/−0.3 dB
Signal purity
Harmonics: < −30 dBc
Spurious: < 30 dBc
Phase noise: < 67 dBc/Hz, at 10 kHz (typical)

Receiver characteristics
Frequency range
Narrowband: 300 kHz to 1300 MHz
Broadband: 10 MHz to 1300 MHz
Dynamic range
50 Ω Narrowband: > 90 dB
Broadband: > 66 dB
75 Ω Narrowband: > 87 dB
Broadband: > 63 dB
Maximum input (0.1 dB compression)
Narrowband: 10 dBm
Broadband: 16 dBm
Input damage level: 20 dBm

Test set characteristics
Test port match: 20 dB
System directivity: 40 dB

RF Connectors
Test Ports: 50 Ω Type N(f)
75 Ω Type N(f)

Physical characteristics
Size: 180 mm H × 430 mm W × 480 mm D (7 in × 17 in × 18.75 in)
Weight: Net, 20.5 kg (45 lbs); shipping, 25 kg (55 lbs)

Detectors/Bridges

External detectors (50 and 75 Ω) and bridge are available for remote device measurements. An unmodulated dc detection mode measures the microwave power directly without using modulation techniques.

HP 86200A 50 Ω Scalar Detector
An external scalar detector for use when measuring external 50 Ω devices.

HP 86201A 75 Ω Scalar Detector
An external scalar detector for use when measuring external 75 Ω devices.

HP 86205A 50 Ω Bridge
An external directional bridge which offers high directivity and excellent port match designed for 50 Ω device measurements.

Upgrade Kits

The following upgrade kits add optional measurement capability to existing HP 8711A network analyzers.

HP 86223A Attenuator Upgrade Kit
Provides the necessary components to retrofit an HP 8711A with a 60 dB step attenuator (Option 1E1). Includes installation at an HP service center. Also available as HP Part Number 08711-60060.

HP 86224A IBASIC Upgrade Kit
Provides the necessary components to retrofit an HP 8711A with IBASIC capabilities (Option 1C2). Includes installation at an HP service center. Also available as HP Part Number 08711-60061.

HP C1405A/ABA DIN Keyboard
PC keyboard to enhance editing capability (Option 1CL).

Calibration Kits

Accuracy enhancement characterizes the systematic errors by measuring known devices (standards) over the frequency range of interest. Kits for the HP 8711A contains standards to characterize these errors.

HP 85032E 50 Ω Calibration Kit
Contains 50 Ω Type N standards used to calibrate the HP 8711A for measurements of devices with 50 Ω Type N connectors. Standards include fixed termination, open circuit and short circuit.

HP 85036E 75 Ω Calibration Kit
Contains 75 Ω Type N standards used to calibrate the HP 8711A for measurements of devices with 75 Ω Type N connectors. Standards include fixed termination, open circuit, and short circuit.

Accessories

HP 11852B 50/75 Ω Minimum Loss Pad
A low SWR minimum loss pad required when measurements are made on 75 Ω devices using a 50 Ω measurement system.

HP 11853A Type N Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 50 Ω Type N connectors.

HP 11854A BNC Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 50 Ω BNC connectors.

HP 11855A Type N Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 75 Ω Type N connectors.

HP 11856A BNC Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 75 Ω BNC connectors.

HP 86211A Type N/Type F Adapter Kit
Adapter kit which provides Type N to Type F adapters necessary when measuring Type F devices on a network analyzer with Type N ports.

HP 86212A Type N/TNC Adapter Kit
Adapter kit which provides Type N to TNC adapters necessary when measuring TNC devices on a network analyzer with Type N ports.

Test Port Cables
Replacement test port cables are available as HP part numbers. The analyzer ships with the BNC type cable as standard.

HP 8120-1839 BNC Test Port Cable, 50 Ω
HP 5063-0061 BNC Test Port Cable, 75 Ω
HP 8120-4781 50 Ω Type N Cable
HP 8120-2408 75 Ω Type N Cable

Ordering Information

	Price
HP 8711A Network Analyzer	$13,500
Opt 1EC 75 System Impedance	$0
Opt 1E1 60 dB Attenuator	$800
Opt 1C2 IBASIC Capability	$1,350
Opt 1CL DIN Keyboard	$210
Opt 1CF Soft Carrying Case	$250
Opt 1CM Rack Mount	$75
HP 86223A Attenuator Upgrade Kit	$1,150
HP 86224A IBASIC Upgrade Kit	$1,550
HP C1405A DIN Keyboard	$150
HP 85032E 50 Ω Calibration Kit	$650
HP 85036E 75 Ω Calibration Kit	$650
HP 11853A Type N Accessory Kit	$500
HP 11854A BNC Accessory Kit	$500
HP 11855A Type N Accessory Kit	$500
HP 11856A BNC Accessory Kit	$500
HP 86200A 50 Ω Scalar Detector	$600
HP 86201A 75 Ω Scalar Detector	$600
HP 86205A 50 Ω Bridge	$1,300
HP 86211A Type N/Type F Adapter Kit	$300
HP 86212A Type N/TNC Adapter Kit	$700
HP 8120-1839 BNC Test Port Cable, 50Ω	$20 ☎
HP 5063-0061 BNC Test Port Cable, 75Ω	$75 ☎
HP 8120-4781 50 Ω Type N Cable	$280 ☎
HP 8120-2408 75 Ω Type N Cable	$800 ☎

☎ For off-the-shelf shipment, call 800-452-4844.

Specifications Summary

Source Characteristics
- **Frequency**
  - **Range:** 300 kHz to 1300 MHz
  - **Resolution:** 1 Hz
  - **Accuracy:** < 5 ppm
- **Output**
  - **Power range:** 0 to 16 dBm
    w/ attenuator −60 to 13 dBm
    75 Ω reduces output by 3 dB
  - **Resolution**
  - **Port flatness:** +/−1.0 dB
    w/attenuator +/−2.0 dB
    w/meter correction +/−0.3 dB
  - **Signal purity**
    - **Harmonics:** < −30 dBc
    - **Spurious:** < 30 dBc
    - **Phase noise:** < 67 dBc/Hz, at 10 kHz (typical)

Receiver Characteristics
- **Frequency range**
  - **Narrowband:** 300 kHz to 1300 MHz
  - **Broadband:** 10 MHz to 1300 MHz
- **Dynamic range**
  - **50 Ω Narrowband:** > 90 dB
    Broadband: > 66 dB
  - **75 Ω Narrowband:** > 87 dB
    Broadband: > 63 dB
- **Maximum input**
  - **Narrowband:** 10 dBm, 0.8 dB compression
  - **Broadband:** 16 dBm, 0.5 dB compression
- **Input damage level:** 20 dBm

Test Set Characteristics
- **Test port match:** 20 dB
- **System directivity:** 40 dB

RF Connectors
- **Test ports:** 50 Ω Type N(f)
  75 Ω Type N(f)

Physical Characteristics
- **Size:** 180 mm H × 430 mm W × 480 mm D (7 in × 17 in × 18.75 in)
- **Weight:** Net, 20.5 kg (45 lbs); shipping, 25 kg (55 lbs)

Detectors/Bridges

External detectors (50 and 75 Ω) and bridge are available for remote device measurements. An unmodulated dc detection mode measures the microwave power directly without using modulation techniques.

HP 86200A 50 Ω Scalar Detector
An external scalar detector for use when measuring external 50 Ω devices.

HP 86201A 75 Ω Scalar Detector
An external scalar detector for use when measuring external 75 Ω devices.

HP 86205A 50 Ω Bridge
An external directional bridge which offers high directivity and excellent port match designed for 50 Ω device measurements.

HP 86207A 75 Ω Bridge
An external directional bridge which offers high directivity and excellent port match designed for 75 Ω device measurements.

Upgrade Kits

The following upgrade kits add optional measurement capability to existing HP 8711A network analyzers.

HP 86223A Attenuator Upgrade Kit
Provides the necessary components to retrofit an HP 8711A with a 60 dB step attenuator (Option 1E1). Includes installation at an HP service center. Also available as HP p/n 08711-60060.

HP 86224A IBASIC Upgrade Kit
Provides the necessary components to retrofit an HP 8711A with IBASIC capabilities (Option 1C2). Includes installation at an HP service center. Also available as HP p/n 08711-60061.

HP C1405A/ABA DIN Keyboard
PC keyboard to enhance editing capability (Option 1CL).

Calibration Kits

Accuracy enhancement characterizes the systematic errors by measuring known devices (standards) over the frequency range of interest. Kits for the HP 8711A contains standards to characterize these errors.

HP 85032E 50 Ω Calibration Kit
Contains 50 Ω Type N standards used to calibrate the HP 8711A for measurements of devices with 50 Ω Type N connectors. Standards include fixed termination, open circuit and short circuit.

HP 85036E 75 Ω Calibration Kit
Contains 75 Ω Type N standards used to calibrate the HP 8711A for measurements of devices with 75 Ω Type N connectors. Standards include fixed termination, open circuit, and short circuit.

Accessories

HP 11852B 50/75 Ω Minimum Loss Pad
A low SWR minimum loss pad required when measurements are made on 75 Ω devices using a 50 Ω measurement system.

HP 11853A Type N Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 50 Ω Type N connectors.

HP 11854A BNC Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 50 Ω BNC connectors.

HP 11855A Type N Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 75 Ω Type N connectors.

HP 11856A BNC Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 75 Ω BNC connectors.

HP 86211A Type N/Type F Adapter Kit
Adapter kit which provides Type N to Type F adapters necessary when measuring Type F devices on a network analyzer with Type N ports.

HP 86212A Type N/TNC Adapter Kit
Adapter kit which provides Type N to TNC adapters necessary when measuring TNC devices on a network analyzer with Type N ports.

Test Port Cables
Replacement test port cables are available as HP part numbers. The analyzer ships with the 50 Ω BNC cable as standard.
- **HP 8120-1839 BNC Test Port Cable, 50 Ω**
- **HP 5063-0061 BNC Test Port Cable, 75 Ω**
- **HP 8120-4781 Type N Cable, 50 Ω**
- **HP 8120-2408 Type N Cable, 75 Ω**

Ordering Information

	Price
HP 8711A Network Analyzer	$13,500
Opt 1EC 75 System Impedance	$0
Opt 1E1 60 dB Attenuator	$800
Opt 1C2 IBASIC Capability	$1,350
Opt 1CL DIN Keyboard	$210
Opt 1CF Soft Carrying Case	$250
Opt 1CM Rack Mount	$75
HP 86223A Attenuator Upgrade Kit	$1,150
HP 86224A IBASIC Upgrade Kit	$1,550
HP 86226A Firmware Upgrade Kit	$50
HP C1405A DIN Keyboard	$98
HP 85032E 50 Ω Calibration Kit	$650
HP 85036E 75 Ω Calibration Kit	$650
HP 11853A Type N Accessory Kit	$500
HP 11854A BNC Accessory Kit	$500
HP 11855A Type N Accessory Kit	$500
HP 11856A BNC Accessory Kit	$500
HP 86200A 50 Ω Scalar Detector	$600
HP 86201A 75 Ω Scalar Detector	$600
HP 86205A 50 Ω Bridge	$1,300
HP 86207A 75 Ω Bridge	$1,300
HP 86211A Type N/Type F Adapter Kit	$300
HP 86212A Type N/TNC Adapter Kit	$700
HP 8120-1839 BNC Test Port Cable, 50 Ω	$20 ☎
HP 5063-0061 BNC Test Port Cable, 75 Ω	$75
HP 8120-4781 Type N Cable, 50 Ω	$280
HP 8120-2408 Type N Cable, 75 Ω	$800

☎ For off-the-shelf shipment, call 800-452-4844.

For the most current prices and product information, contact your local Hewlett-Packard sales office—see page 654.

Specifications Summary

Source Characteristics
Frequency
Range: 300 kHz to 1300 MHz
Resolution: 1 Hz
Accuracy: < 5 ppm
Output
Power range: 0 to 16 dBm
w/attenuator −60 to 13 dBm
75 Ω reduces output by 3 dB
Resolution
Port flatness: +/−1.0 dB
w/attenuator +/−2.0 dB
Signal purity
Harmonics: < −30 dBc
Spurious: < 30 dBc
Phase noise: < 67 dBc/Hz, at 10 kHz (typical)

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Frequency range
Narrowband: 300 kHz to 1300 MHz
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50 Ω Narrowband: > 90 dB
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75 Ω Narrowband: > 87 dB
Broadband: > 63 dB
Maximum input
Narrowband: 10 dBm, 0.8 dB compression
Broadband: 16 dBm, 0.5 dB compression
Input damage level: 20 dBm

Test Set Characteristics
Test port match: 20 dB
System directivity: 40 dB

RF Connectors
Test ports: 50 Ω Type-N(f)
75 Ω Type-N(f)

Physical Characteristics
Size: 180 mm H × 430 mm W × 480 mm D (7 in × 17 in × 18.75 in)
Weight: Net, 20.5 kg (45 lbs); shipping, 25 kg (55 lbs)

Detectors/Bridges

External detectors (50 and 75 Ω) and bridge are available for remote device measurements. An unmodulated dc detection mode measures the microwave power directly without using modulation techniques.

HP 86200A 50 Ω Scalar Detector
An external scalar detector for use when measuring external 50 Ω devices.

HP 86201A 75 Ω Scalar Detector
An external scalar detector for use when measuring external 75 Ω devices.

HP 86205A 50 Ω Bridge
An external directional bridge which offers high directivity and excellent port match designed for 50 Ω device measurements.

HP 86207A 75 Ω Bridge
An external directional bridge which offers high directivity and excellent port match designed for 75 Ω device measurements.

Upgrade Kits

The following upgrade kits add optional measurement capability to existing HP 8711A network analyzers.

HP 86223A Attenuator Upgrade Kit
Provides the necessary components to retrofit an HP 8711A with a 60 dB step attenuator (Option 1E1). Includes installation at an HP service center. Also available as HP p/n 08711-60060.

HP 86224A IBASIC Upgrade Kit
Provides the necessary components to retrofit an HP 8711A with IBASIC capabilities (Option 1C2). Includes installation at an HP service center. Also available as HP p/n 08711-60061.

HP 86226A Firmware Upgrade Kit
Provides the necessary components to upgrade HP 8711A to current firmware revision.

Calibration Kits

Accuracy enhancement characterizes the systematic errors by measuring known devices (standards) over the frequency range of interest. Kits for the HP 8711A contains standards to characterize these errors.

HP 85032E 50 Ω Calibration Kit
Contains 50 Ω Type N standards used to calibrate the HP 8711A for measurements of devices with 50 Ω Type N connectors. Standards include fixed termination, open circuit and short circuit.

HP 85036E 75 Ω Calibration Kit
Contains 75 Ω Type N standards used to calibrate the HP 8711A for measurements of devices with 75 Ω Type N connectors. Standards include fixed termination, open circuit, and short circuit.

HP 85039E 75 Ω Calibration Kit
Contains 75 Ω Type F standards used to calibrate the HP 8711A for measurements of devices with 75 Ω Type F connectors. Standards include fixed termination, open circuit, and short circuit.

Accessories

HP 11852B 50/75 Ω Minimum Loss Pad
A low SWR minimum loss pad required when measurements are made on 75 Ω devices using a 50 Ω measurement system.

HP 11853A Type N Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 50 Ω Type N connectors.

HP 11854A BNC Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 50 Ω BNC connectors.

HP 11855A Type N Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 75 Ω Type N connectors.

HP 11856A BNC Accessory Kit
Accessory kit which provides the RF components required for measuring devices having 75 Ω BNC connectors.

HP 86211A Type N/Type F Adapter Kit
Adapter kit which provides Type N to Type F adapters necessary when measuring Type F devices on a network analyzer with Type N ports.

HP 86212A Type N/TNC Adapter Kit
Adapter kit which provides Type N to TNC adapters necessary when measuring TNC devices on a network analyzer with Type N ports.

Test Port Cables
Replacement test port cables are available as HP part numbers. The analyzer ships with the 50 Ω BNC cable as standard.
HP 8120-1839 BNC Test Port Cable, 50 Ω
HP 5063-0061 BNC Test Port Cable, 75 Ω
HP 8120-4781 Type N Cable, 50 Ω
HP 8120-2408 Type N Cable, 75 Ω

Ordering Information

HP 8711A Network Analyzer
Opt 1EC 75 System Impedance
Opt 1E1 60 dB Attenuator
Opt 1C2 IBASIC Capability
Opt 1CL DIN Keyboard
Opt 1CF Soft Carrying Case
Opt 1CM Rack Mount
HP 86223A Attenuator Upgrade Kit
HP 86224A IBASIC Upgrade Kit
HP 86226A Firmware Upgrade Kit
HP 85032E 50 Ω Calibration Kit
HP 85036E 75 Ω Calibration Kit
HP 11853A Type-N Accessory Kit
HP 11854A BNC Accessory Kit
HP 11855A Type-N Accessory Kit
HP 11856A BNC Accessory Kit
HP 86200A 50 Ω Scalar Detector
HP 86201A 75 Ω Scalar Detector
HP 86205A 50 Ω Bridge
HP 86207A 75 Ω Bridge
HP 86211A Type-N/Type-F Adapter Kit
HP 86212A Type-N/TNC Adapter Kit
HP 8120-1839 BNC Test Port Cable, 50 Ω
HP 5063-0061 BNC Test Port Cable, 75 Ω
HP 8120-4781 Type-N Cable, 50 Ω
HP 8120-2408 Type-N Cable, 75 Ω

For the most current prices and product information, contact your local Hewlett-Packard sales office—see page 691.